

**REMARKS**

Two obvious typographic errors in the specification have been corrected.

The materials recited in claims 4 and 9 are an additional ingredient in the paste and are not a part of the glass frit. See page 8, lines 12 et seq. Although it is believed this was apparent from the text of the original claims as filed, additional language has been added to make this even more clear.

To expedite allowance of this application, claim 13 has been cancelled. It will be recognized that claim 1 is still sufficiently broad as to include the resistance adjuster.

In view of the foregoing, withdrawal of the rejection under 35 U.S.C. § 112 is respectfully requested.

The rejection of all claims under 35 U.S.C. § 103 over Carroll in view of Tanigami is respectfully traversed.

The present invention relates to a conductive paste and its use in conjunction with a conductive pattern on a glass substrate. The paste comprises a vehicle, a conductive component and a glass frit, where the glass is made from  $\text{Bi}_2\text{O}_3$ ,  $\text{B}_2\text{O}_3$ ,  $\text{SiO}_2$ ,  $\text{Al}_2\text{O}_3$  and about 0.5 to 5% by weight of  $\text{NiO}$  and optionally  $\text{ZnO}$ . As a result of the presence of the  $\text{NiO}$ , the solderability and bonding strength is improved as is the resistivity of the obtained film. These effects are demonstrated in the working examples.

The Carroll reference is asserted to teach the composition without the NiO. Accordingly, the rejection requires additional reliance on Tanigami. It is respectfully submitted that the combination does not render the instant claims obvious.

Tanigami relates to a heat generating system which may optionally contain one or more of six metal powders and/or six metal oxides of which one is nickel oxide. This thus includes a huge number of possibilities. There is nothing in this reference which directs the person skilled in the art to nickel oxide and the selection of the same would be serendipitous. Moreover, the purpose of the metal or metal oxide, used in an amount of 1-20 % based on the Mb silicide and glass frit present, is to lower electrical resistance and TCR. There is no reason that one skilled in the art would even consider Tanigami even assuming it was desired to somehow improve the Carroll system. Tanigami relates to heaters for the home or industry while Carroll is concerned with automotive backlight defoggers. Moreover, lowering electrical resistance and TCR is not why the NiO is used in the present invention.

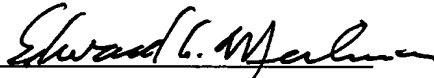
Beyond the foregoing, even if one for some unknown reason decided to select something from Tanigami to incorporate into Carroll, and then somehow decided to select NiO, and then somehow decided to select an amount of NiO within the range of 0.5-5%, each of which is highly questionable, the claimed composition would still not be realized. The reason is that the NiO in Tanigami is an additive to a composition containing a glass whereas in the present invention, the NiO is a component of the glass, i.e., one of the oxides which are combined and fused to form a glass. Nothing in Tanigami teaches or suggests forming a glass from a composition which includes NiO. Thus, the asserted combination, no matter how manipulated, even using hindsight, cannot realize the claimed invention.

It is respectfully submitted that the art rejection should be withdrawn.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

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Respectfully submitted,

By 

Edward A. Meilman

Registration No.: 24,735

DICKSTEIN SHAPIRO MORIN &  
OSHINSKY LLP

1177 Avenue of the Americas  
41st Floor

New York, New York 10036-2714  
(212) 835-1400

Attorney for Applicant